



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,449	02/07/2002	Lukas Novotny	176/60921 (2-11150-912)	9533

7590 03/12/2007  
Gunnar G. Leinberg, Esq.  
NIXON PEABODY LLP  
Clinton Square  
P.O. Box 31051  
Rochester, NY 14603-1051

EXAMINER

STAHL, MICHAEL J

ART UNIT PAPER NUMBER

2874

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/068,449

Applicant(s)

NOVOTNY ET AL.

Examiner

Mike Stahl

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28,31-38 and 40-61 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8,14-21,27,28,36-38 and 45-59 is/are allowed.
- 6) ☒ Claim(s) 9,22,31,40,60 and 61 is/are rejected.
- 7) ☒ Claim(s) 10-13,23-26,32-35 and 41-44 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 5, 2006 has been entered.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9, 22, 31, 40, and 60-61 are rejected under 35 U.S.C. 102(b) as being anticipated by Kurita et al. (US 5452384).

Claim 9: Kurita discloses a system (fig. 3) comprising: an optical element; at least one structure **10** at least partially in a non-opaque portion of the optical element and at least adjacent a surface of the optical element; and a source **20** of light with a mode profile that provides an electric field which has a vector component substantially perpendicular to the surface of the optical element, the source positioned to propagate at least a portion of the light through the optical element onto an object **30** (30 is a detector, the arrows next to it in fig. 3 should have been pointing toward it), the structure **10** enhancing the electric field of the light which optically interacts with the object; wherein the optical element comprises an optical base **51** and an optical

Art Unit: 2874

layer **50** connected to the optical base, the structure **10** is at least partially in and at least adjacent to a surface of the optical layer.

Claim 22: The acts of providing and using the Kurita device described above with regard to claim 9 include the recited steps.

Claim 31: Kurita discloses a lens (fig. 3) comprising: an optical element; and a structure **10** at least partially in a non-opaque portion of the optical element and at least adjacent a surface of the optical element; wherein the optical element comprises an optical base **51** and at least one optical layer **50** connected to the optical base, the structure **10** is at least partially in and at least adjacent to a surface of the optical layer.

Claim 40: The act of constructing the Kurita device described above with regard to claim 31 includes the recited steps.

Claim 60: Kurita discloses a system (fig. 3) comprising: an elongated optical element; at least one structure **10** at least partially in a non-opaque portion of the optical element; and a source of light **20** positioned to propagate at least a portion of the light through the optical element in a direction generally parallel to the surface of an object **30**, the structure enhancing the electric field of the light propagating through the optical element which interacts with the object.

Claim 61: The act of providing the system described above with regard to claim 60 meets the recited steps.

Art Unit: 2874

Claims 60-61 are rejected under 35 U.S.C. 102(b) as being anticipated by Keilmann (US 4994818).

Claim 60: Keilmann discloses a system (fig. 3) comprising: an elongated optical element 10; at least one structure 20 at least partially in a non-opaque portion 22 of the optical element; and a source of light 16 (not shown) positioned to propagate at least a portion of the light through the optical element in a direction generally parallel to the surface of an object (not shown), the structure enhancing the electric field of the light propagating through the optical element which interacts with the object.

Claim 61: The act of providing the system described above with regard to claim 60 meets the recited steps.

It is noted that the recitation that light propagates or is directed through the optical element in a direction generally parallel to a surface of an object is technically but marginally supported in the original disclosure. The original disclosure predominantly teaches that light propagates through the optical element in a direction normal (perpendicular) or oblique to the surface of the object, e.g. specification at [0034]. The term "parallel" occurs only in [0005] and [0028]. However, since an object to be investigated is understood to be three-dimensional, some portion of its surface would technically be parallel to light in the optical element (e.g. for a film, the surface at the edges of the film, even if it is on a microscopic scale). The same interpretation is applied to whatever object is investigated by the Keilmann system for purposes of the rejection above.

***Response to Amendment*** (December 5, 2006)

The rejections of claims 1 and 14 and various respective dependent claims under Ueyanagi and Keilmann in the last Office action have been withdrawn in view of the changes to claims 1 and 14 (the structure in each reference does not satisfy the added conditions). The rejection of claims 27 and 36 and various respective dependent claims under Keilmann in the last action have been withdrawn since claims 27 and 36 were changed to incorporate previously identified allowable subject matter.

***Allowable Subject Matter***

Claims 45-53 remain allowed as set forth in the last Office action (mailed June 5, 2006). Claims 1-8, 14-21, 27-28, 36-38, and 54-57 are presently allowed since base claims 1, 14, 27, and 36 were amended to distinguish over previously applied art. Claims 58 and 59 are presently allowed since they were previously identified as containing allowable subject matter and have been amended into independent form.

Claims 10-13, 23-26, 32-35, and 41-44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Kurita is newly applied to base claims 9, 22, 31, and 40 in this action, but it does not disclose or suggest the features of the respective dependent claims in combination with all the limitations of the base claims.

Art Unit: 2874

***Conclusion***

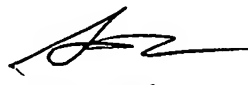
US 2005/0146800 is listed on the attached PTO-892 form for disclosing relevant subject matter, though it is not available as prior art.

Inquiries about this letter may be directed to examiner Stahl at the number below.

Inquiries of a general or clerical nature (e.g., a request for a missing form or paper, etc.) should be directed to the technical support staff supervisor at 571-272-1626. Official correspondence which is eligible for submission by facsimile and which pertains to this application may be faxed to 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Questions about the Private PAIR system should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mike Stahl MSS  
2874  
571-272-2360

February 26, 2007

  
SUNG PAK  
PRIMARY EXAMINER